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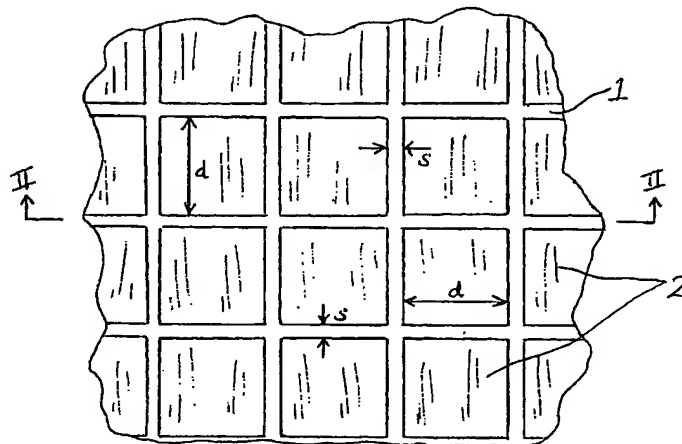
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(54) Title: MICROWAVABLE PACKAGING MATERIAL



(57) Abstract: A material for use in covering objects for microwave heating comprises a substrate (1) substantially transparent to microwave radiation bearing an array of low emissivity metal patch elements (2) defining a frequency selective surface adapted to pass microwave radiation and reflect thermal infrared radiation. The patch elements (2), typically of aluminium, preferably have a characteristic dimension no greater than about 500µm and a spacing no greater than about 100µm, while the emissivity of the combined substrate and frequency selective surface is preferably no greater than about 0.4. The material is useful as a packaging for chilled or frozen microwavable foodstuffs, where its low emissivity assists in thermal insulation during storage or transportation and capturing of heat within the package during microwave cooking, where it can be safely used despite the presence of metal in the structure due to its configuration as a frequency selective surface. Potential uses also include bandages or patches worn on the body during microwave heat treatment of sports injuries and the like and various other microwave heating applications.

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